



NCB International Seminar on Cement, Concrete and Building Materials

**03-06 DECEMBER 2019
NEW DELHI, India**



**National Council for Cement and Building Materials
www.ncbindia.com**



INTRODUCTION

National Council for Cement and Building Materials (NCB), the apex body in India for research, technology development and transfer, education and industrial services for cement, allied building materials and construction industries, is organizing this International Seminar on Cement, Concrete and Building Materials as a follow-up of the fifteen NCB International Seminars organized earlier, each with substantial international participation. The NCB International Seminars have emerged as singular biennial events in this part of the globe which the cement and construction industries the world over look forward to for participation. The continued interest of participants over the years is indication of the benefits reaped by them and has enabled this event reach the milestone of its 16th edition. While reviewing the developments which have taken place during the intervening period since the last event in the series, especially in the areas of alternate fuels and raw materials, climate change, emissions control, high performance concrete, nano-technology etc., the 16th NCB International Seminar through the Technical Exhibition to be held as a part of the event will give additional exposure to the latest in available technologies and services for efficient operation of cement plants, making of concrete and construction activities. The event will serve as an excellent meeting point for the suppliers and the clients, especially from developing countries for mutual benefit.

Like the previous ones in the series, the 16th NCB International Seminar will also be sponsored by a number of leading international and national cement, concrete and their equipment / machinery manufacturing organizations, construction companies and government bodies.

DATES AND VENUE

DATES : 03-06 December 2019

VENUE : Manekshaw Centre, Parade Road, Delhi Cantt., New Delhi 110 010

Manekshaw Centre, in the outskirts of Delhi Cantonment, is the finest and popular venue for National/ International Seminars and Exhibitions. It provides serene environment for technical deliberations and generous spreads for exhibition. It is located at about 1 Km from Dhaura Kuan Metro station towards New Delhi International Airport and opposite to Subroto Park.

Highlights of
15th NCB International Seminar
(05-08 December 2017)

1200 Delegates from 21 Countries

200 Technical Papers Presented in
25 Sessions

119 Stalls by 80 Exhibitors in the
Technical Exhibition
ORGANIZED CONCURRENTLY

REGISTRATION

Interested participants should complete and return the attached Registration Form (also downloadable from NCB website www.ncbindia.com) as early as possible. Online Registration can also be done.

Registration Fee per Participant and Payment Schedule						
Category / Sub-Category	Date of Payment					
	Upto 31 July 2019		Upto 15 October 2019		From 16 October 2019	
	National (Rs.)	Overseas (US\$)	National (Rs.)	Overseas (US\$)	National (Rs.)	Overseas (US\$)
Delegates						
• General	18,000	1,350	20,000	1,500	22,000	1,650
• Authors making presentation (only one per accepted paper)	16,000	1,250	16,000	1,250	18,000	1,400
• Govt. Organisations / Govt. R&D Institutions / PSUs / Academic Institutions	14,000	1,050	14,000	1,050	16,000	1,200
• Students*	8,000	700	8,000	700	9,000	800
• Accompanying Persons (Spouse only)	6,000	200	6,000	200	6,000	200
Team Discount	One free registration (same category) for every five paid registrations.					
Important	<p>As required by the norms of Venue Management :</p> <ul style="list-style-type: none"> All Overseas Delegates / Exhibitors / Accompanying Persons must indicate their willingness to participate latest by 10 September 2019 (Name, Designation, Nationality, Copy of Passport, Contact information, E-mail ID required). All Indian nationals – Delegates / Exhibitors / Accompanying Persons must indicate their willingness to participate latest by 31 October 2019 (Name, Designation, Contact information, E-mail ID required). <p>However, to avail the discounts, the above payment schedule should be adhered to.</p>					
Note : Above rates are inclusive of all taxes ★ With Proper ID proof from University / Institute Recognized / Accredited by Government						

The Registration Fee for the Participating Delegates Covers : Seminar Kit and Seminar Proceedings (Print Volume of Abstracts and CD of Papers), Participation in Inaugural and Concluding Sessions, Admission to the Technical Exhibition, Morning and Afternoon Coffee/Tea and Lunch on all Seminar days, Invitation to Cultural Programme & Dinner, Informal Get-together.

The Registration Fee for the Accompanying Persons Covers : Participation in Inaugural and Concluding Sessions, Admission to the Technical Exhibition, Morning and Afternoon Coffee / Tea and Lunch on all Seminar days, Invitation to Cultural Programme & Dinner, Informal Get-together, Sightseeing and Shopping in Delhi, Ladies Programmes.



CANCELLATION

On cancellation of registration, refund of registration fee will be as follows:

- Upto 15 October 2019 20% deduction
- After 15 October 2019 No refund

Cancellation charges may be waived at the discretion of the Secretariat, if the originally registered delegate is in a position to arrange for an alternate in his place.



PARTICIPATION

Seminar content is designed to contain state-of-the-art technologies, reviews and case studies on modernization & up-gradation, retrofitting / re-engineering and plant rejuvenation along with environmental and sustainability concerns. Seminar shall also cover advances in cement & concrete research and evolving issues for futuristic technology.

The Seminar, therefore, provides an ideal opportunity to :

- Cement and concrete professionals from policy makers / top management personnel to senior and middle level executives as well as engineers / chemists associated with manufacture of Cement, Concrete and Ready Mixed Concrete, Lime and allied building materials
- Equipment / machinery manufacturers, designers and consultants
- Engineers, technologists, scientists, academicians, research scholars, students and economists
- Users of cement and building materials and construction agencies to deliberate, share and assimilate the ideas of the world's leading experts on the latest national and international trends and developments

PAPERS AND TIME SCHEDULE

Papers covering any of the theme areas are invited from interested persons. The following time schedule will be followed :

	Submission	Acceptance by Secretariat
Abstract (300 to 500 words)	31 March 2019	30 April 2019
Full Paper & one page (max) Abstract (final) with figures, if any	31 May 2019	30 June 2019

Soft copy of abstracts and final manuscripts done in MS-Word and PDF are to be submitted. All abstracts as also the final papers received will be reviewed by seminar technical committee. Soft copy of full manuscripts of accepted papers from registered delegates only will be provided in Seminar Kit. Full manuscripts should be prepared as per prescribed guidelines, which will be communicated to the authors of accepted abstracts. Guidelines can be seen at NCB website also.

Only a limited number of papers from Registered Delegates will be selected for presentation. The authors of the papers will be informed accordingly.

TECHNICAL DELIBERATIONS

The technical deliberations at the Seminar will cover the whole spectrum, from geological exploration/extraction of limestone to manufacture and utilisation of cement and building materials with focus on latest innovations in technology. The areas needing special attention in the present context have been identified as follows:

☞ Raw Material Resources Management

- Cement raw materials – challenges ahead
- Advances in limestone deposit exploration, evaluation and exploitation
- State-of-the art mining equipment and practices
- Maintenance of heavy earth moving and mining equipment
- Production planning in mines for optimal utilization of resources
- Utilization of low grade limestone
- Upgrading of limestone and mines reject for cement manufacture
- Mining waste management & utilization
- Resource optimization and sensitivity analysis
- Mining, habitat and sustainable development
- Safety & health practices in limestone mining

☞ Energy Conservation Systems

- Energy efficient technologies and operations
- Energy audit and management
- Advances in combustion systems
- New and renewable sources of energy
- Waste heat recovery and co-generation of power
- Role of regulatory provisions in energy conservation
- Energy efficient buildings and structures

☞ Alternate / Waste Fuels and Raw Materials

- Use of alternate fuels including MSW, WDF, bio-fuels etc
- Use of low grade fuels
- Co-processing of hazardous wastes in cement kiln
- Alternate raw materials including industrial wastes / by-products
- Logistics & transportation issues
- Health & safety aspects

☞ Cement Plant Machinery and Project Engineering

- Optimum plant design
- Advances in cement plant machinery
- Packaging, handling and transportation of cement

including bulk systems

- Technology upgradation / modernization / debottlenecking / re-engineering
- Financial restructuring and plant rejuvenation
- Ultra high capacity cement kiln and mill systems

☞ Productivity Enhancement and Process Optimization

- Total productivity enhancement and cost reduction techniques
- Optimization of plant operations and trouble shooting
- Refractory engineering practices and recent advances
- Condition monitoring techniques
- Technical audit, plant maintenance and benchmarking
- Advances in instrumentation and process automation
- Supply chain management

☞ Portland, Blended and Special Cements

- Advances in cement chemistry
- Optimization of raw mix design
- Use of mineralisers, fluxes and activators
- Low energy and special cements
- Hydration studies of cementitious systems
- Mineral admixtures
- Binary and ternary blended cements
- Composite and Portland limestone cements
- Calcined clay based cements
- Green cement / Eco-cement

☞ Performance and Durability of Concrete

- Concrete of low permeability / high electrical resistivity
- Use of stainless steel and composite reinforcement
- High strength concrete, High performance concrete, Ultra-high strength concrete
- Improvement of performance by use of fibre reinforcement in concrete
- Durability of concrete in aggressive environment
- Chemical admixtures, Corrosion inhibitors and Coatings
- Additions for enhanced durability of concrete - Blast furnace slag, fly ash, silica fume, metakaolin and other

- Supplementary Cementitious Materials (SCMs) or Pozzolanas
 - Testing for durability
- ☞ **Performance-based Design of Concrete Structures**
 - Planning for durability and Performance based design
 - Structural design using high strength / ultra-high strength concrete
 - Structural design using fibres / fibre composites reinforced concrete
 - Service life design (prediction) / residual life assessment
- ☞ **Concrete Deterioration Mechanisms and Reinforcement Corrosion**
 - Chloride ingress and chloride induced corrosion
 - Carbonation and carbonation induced corrosion
 - Initiation and propagation of corrosion of steel rebars
 - Alkali aggregate reactions
 - Sulfate attack (formation of Ettringite, Thaumasite, Gypsum etc.)
 - Delayed Ettringite formation
 - Freeze / thaw attack
 - Effect of cracks
- ☞ **Distress Investigation, Repair / Strengthening / Retrofitting of Concrete Structures**
 - Non-destructive testing of concrete
 - Repair systems
 - Applications of membrane & coatings
 - Chloride removal techniques
 - Re-alkalization techniques
 - Cathodic protection of steel reinforcement
 - Use of fibre wrapping
 - Water proofing
 - Seismic retrofitting
 - External pre-stressing
- ☞ **Sustainable Construction Practices and Use of Alternate Aggregates & Geopolymer Concrete**
 - Construction project management
 - Construction practices with respect to speed economy & quality
 - Ready mixed concrete
 - Self-compacting concrete, concrete rheology and pumpability
 - Special concretes such as pervious concrete, plastic concrete and controlled low strength concrete
 - Geopolymer Concrete – Production, use and design aspects
 - Quality control, quality assurance & technical audit of concrete construction
 - Use of C&D waste, fly ash, slags and bottom ash as aggregate
 - Use of other waste-based materials, sintered and manufactured aggregates, fly ash bricks, Autoclaved Aerated Concrete (AAC)
 - Concrete pavements
 - Newer construction technologies
 - Precast concrete technology
 - High volume fly ash concrete (HVFA)
- ☞ **Other Building Materials and Binders**
 - Lime, fly ash, clay & gypsum based materials
 - Waste based binders / cementitious materials
- ☞ **Marketing and Consumer Protection**
 - Marketing research and analysis
 - Innovative marketing practices
 - National and International Standards
 - HRD needs and support systems for cement and construction industries
 - New training tools
 - Skill upgradation
- ☞ **Environmental Management, Sustainable Development and Safety**
 - Environmental improvement through modern technologies in cement and construction industries
 - Sustainable development initiatives
 - Role of regulatory provisions for environment improvement and sustainable development
 - Leaching of heavy metals in cement and concrete systems
 - NO_x, SO₂ control – Primary & Secondary measures
 - Dust control measures
 - Climate change implications and initiatives by cement and construction industries
 - Life cycle assessment in cement manufacture
 - Carbon footprint
 - Water footprint
 - EIA / EMP studies in cement and construction sectors
 - Rehabilitation of limestone mines
 - Voluntary environmental initiatives
 - Safety, Health and Environment

☞ Total Quality Management

- Quality management systems
- Integrated management system
- Quality control and quality assurance in manufacture and utilization of cement
- Advances in laboratory automation
- Development of Certified Reference Materials (CRMs)
- Statistical quality control / Statistical process control
- Advances in testing and calibration methods
- Proficiency testing
- Advances in TQM practices
- Voluntary TQM initiatives
- TQM tools & techniques
- Benchmarking of quality parameters
- Sustainable excellence

☞ Emerging Trends

- Geopolymer binders
- Nano technology application in cement and concrete
- Energy efficient materials
- Expanding the horizon of cement use



- Use of Drones for assessment of Concrete Structures
- 3D Printing of Concrete Structures (materials and construction)
- Use of polymers and resins with cementitious systems
- Technology trends and forecasts
- Green technologies and practices for sustainable growth
- CO₂ capture & reuse initiatives
- CSR initiatives

Discussions covering technical papers on the above areas will be classified and spread over various technical sessions. Authors of the papers selected for presentation will be requested to briefly present the salient features of their papers. These will be followed by discussion from the floor.

TECHNICAL EXHIBITION

A Technical Exhibition bearing on the themes of the Seminar will be an added opportunity for the delegates to have an exposure of the state-of-the-art developments around the world. Exhibits would be components, scale models, literature & books, charts, photographs etc.

Category of Exhibitor	Service Charges per sq m		Free Delegates for Each Stall		
	Date of Payment		Size (mxm)		Category of Delegate
	Upto 31 July 2019	01 August 2019 onwards	(3x3)	(3x2)	
National	Rs. 18,500/-*	Rs. 19,500/-*	02	01	Indian Nationals only
Overseas	US\$ 700	US\$ 750	02	01	Overseas or Indian Nationals

* Plus GST as Applicable

- Only 118 stalls are available
- Stalls shall be booked on first-pay-first-served basis
- No refund on Cancellation
- Details of layout, facilities and terms and conditions will be sent to interested exhibitors on request
- Visit ncbindia.com for details.
- Exhibitors will be given 50% discount on Advertisement rates in Seminar publication

INTERNATIONAL EXPERIENCES

Exchange of views with delegates, experiences from abroad, covering developments relevant to India and frontiers of achievements which could be advantageously utilised, will specially enrich the Seminar. The highlights of international experiences will be the Invited Lectures by renowned international experts. Delegates will get an opportunity to have interaction with these and other experts participating in the Seminar.

PUBLICATION

A publication of proceedings of seminar containing one page abstract of accepted papers will be brought out and provided in the seminar kit.

ADVERTISEMENT RATES

Advertisement will be printed in the publication of Seminar Proceedings. The details are as follows :

Advertisement Position	Print Area (mm)	National (Rs.) *	Overseas (US\$)
Full Page	180 x 240	40,000	1,500
Half Page (Horizontal)	180 x 115	20,000	1,000
Half Page (Vertical)	85 x 240	20,000	1,000

*Plus GST as Applicable

All advertisements will be in colour. Advertisement material (Hard & Soft Copy) may be provided in Corel Draw, Illustrator or Photoshop in open format together with EPS or PDF, not less than 300 dpi. Rates mentioned above are net and do not include agency commission.

Payment can be made through bank transfer / RTGS / NEFT. The advertisement material should reach latest by 30 September 2019 .

Exhibitors will be given 50% discount on advertisement rates.





16th NCB International Seminar on Cement, Concrete and Building Materials

03 - 06 December 2019, New Delhi, INDIA

REGISTRATION FORM

Name and Address of the Nominating Organisation : _____

City : _____ PIN/Zip : _____ Country : _____

Phone : _____ Fax : _____

E-mail : _____

Delegate Name : _____ Designation : _____

Email : _____ Mobile : _____

Nationality : _____ Passport No* : _____ Valid Upto* : _____

Name : _____

Nationality : _____ Passport : _____

Particulars of Accompanying Person (Spouse only) (for Foreign Nationals)

Particulars of Fee Remittance :

Bank transfer/RTGS/NEFT can be made to Savings Bank Account No. 0330101028220 of National Council for Cement and Building Materials, Canara Bank, 8-A, Nehru Ground, New Industrial Town, Faridabad, Haryana – 121 001, India.

IFSC Code No. CNRB0000330.

MICR Code: 110015108. SWIFT CODE: CNRBINBBEAR.

PAN Number of National Council for Cement and Building Materials : AAATN2477N.

RTGS / NEFT / Transaction No.	Date	Amount : Rs. / US\$	Drawn on (Name of Bank)

I understand and agree to the Cancellation Policy & Terms of Participation as explained in Seminar Bulletin-1

Signature of the Nominating Authority/Delegate with Seal

Wherever necessary, use additional sheet to provide the complete detail.

(Photocopies of the Form are also acceptable, can also be downloaded from NCB Website : www.ncbindia.com)

To
Head of Centre for Industrial Information Services (I)
16th NCB International Seminar
National Council for Cement and Building Materials
34 KM Stone, Delhi-Mathura Road (NH2)
Ballabgarh – 121 004, Haryana
India

SEMINAR LANGUAGE

The official language of the Seminar is English. All papers therefore should be drafted in English only. All deliberations during the Seminar will also be conducted in English language.

AWARDS

Authors of ten papers which are adjudged by the panel of judges, appointed by NCB, as the best contributions to the Seminar from the point of view of serving the needs and closest to implementation in cement, concrete and building materials industries, will be given awards and certificates at the Concluding Session.

SPONSORSHIP SCHEMES

Many organisations have shown interest for being associated with the Seminar as Sponsors. The Secretariat has drawn up very attractive schemes with host of complimentary benefits to the Sponsors under different categories. Details of the schemes are available on request.

The interested organizations can also associate themselves with the event for gaining additional publicity as under:

- Sponsoring Lunch, Dinner and High Tea with publicity through special signages at the venue, Announcement through slide in the seminar hall and invitation card for the same in the delegate kit
- Sponsoring the delegate kit bag or gift items with logos of company / organisation and the Seminar
- Distribution of literature / catalogues in the Seminar hall or delegate kit bag, on payment.

Other proposals for Sponsorship are also welcome.

TOURS AND VISITS

Technical visits to cement and building material manufacturing plants, construction sites and industrial complexes as well as sight-seeing tours to places of historical and cultural interest would be arranged after the conclusion of the Seminar, details of which will be sent to those who register for the seminar. Post-seminar tours include attractive proposals to visit places of historical and cultural interest like Agra, Goa, Jaipur, Kathmandu and Khajuraho, if sufficient response is received from the participants.

For the accompanying ladies, special programmes, like local Shopping, Yoga, Mehndi, Rangoli and Herbal therapy demonstration, visit to Fashion Shows and Boutiques will be arranged.





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Organized by :
National Council for Cement and Building Materials, India



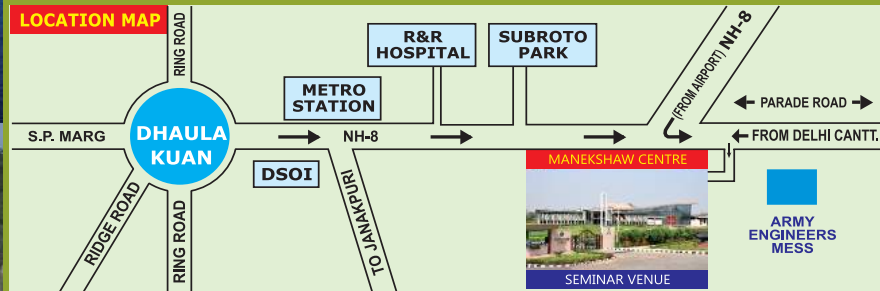
SPECIFIC CONTACTS

	Email ID	Contact Details
Seminar	seminar@ncbindia.com; seminar2@ncbindia.com	Tel.: +91-129-4192279, 339, 222, 2242051 Fax: +91-129-2242100 Cell: +91-9711407555, 9868795977
Exhibition	exhibition.ncb@gmail.com; exhibition@ncbindia.com	Tel. & Cell: +91-129-4192342; +91-9873228225 Tel. & Cell: +91-129-4192342; +91-9555806517
Sponsorship	sponsorship.ncb@gmail.com; sponsorship@ncbindia.com	Tel. & Cell: +91-129-4192237; +91-9891989540
Advertisement	ncbseminarad@gmail.com	Tel. & Cell: +91-129-4192330; +91-9810506261

Visit our Website : www.ncbindia.com

Terms of Participation

NCB is not liable for any acts of a Third Party in respect of the Seminar & Exhibition, and is not liable for any injury, loss, inconvenience, or damage, to person or property in connection with the holding of the Seminar & Exhibition. In addition and without limitation, NCB is not responsible for any injury, loss, inconvenience, or damage, to person or property in connection with the holding of the Seminar & Exhibition, whether resulting from, but not limited to acts of God or Force Majeure. NCB reserves the right to change the itinerary for the Seminar & Exhibition, or its features at any time and for any reason, with or without notice, and NCB shall not be liable for loss of any kind as a result of any such change. The Courts at New Delhi, shall have exclusive jurisdiction in respect of all matters concerning or related to the Seminar & Exhibition. All such disputes shall be referred to a Sole Arbitrator to be exclusively appointed by NCB.



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